

**Remarks**

**Modifications to the Claims**

By the foregoing Amendment, Claims 1, 19, 22, 40, 41, and 42 are amended, as requested by the Examiner. Entry of the Amendment, and favorable consideration thereof, is earnestly requested.

**Response to the Claim Rejections under 35 USC § 103 for Obviousness**

Claims 1-2, 10-12, 18-23, 31-33, 39-44, 52-54, 60-65, 73-75, and 81-82 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al (US Pat. 5,788,688) hereafter "Bauer," in view of what is well known in the art.

Claims 3-4, 8, 13-14, 17, 24-25, 29, 34-35, 38, 45-46, 50, 55-56, 59, 66-67, 71, 76-77, and 80 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1, 22, 43, and 64 above, and further in view of Flach et al (US Pat. 6,589,170).

Claims 5, 15, 26, 36, 47, 57, 68, and 78 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer and Flach as applied to claims 4, 14, 25, 35, 46, 56, 67, and 77, and further in view of what was well known in the art.

Claims 6-7, 16, 27-28, 37, 48-49, 58, 69-70, and 79 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1, 22, 43, and 64 above, and further in view of Suzuki (US Pat. 7,103,646).

These rejections are respectfully traversed, and the Applicant submits that claims 1-8, 10-29, 31-50, 52-71 and 73-82 are further patentable over the cited art in view of the following.

None of the prior art references, Bauer, Flach, or Suzuki, directly anticipates the claims as amended. The Examiner acknowledges that the present invention requires that at least one ancillary medical device is in communication with the first translator which receives command data via the surgical network, and that Bauer does not teach this improvement. Applicant respectfully submits that all prior art references do not directly disclose, teach, or suggest this improvement.

The Examiner urges that it would have been an obvious modification of Bauer to require transmitting command and control information to an auxiliary medical device such as a camera via the surgical network. However, Bauer directly teaches against this fact. Bauer indicates a plurality of communication interface circuits, one for each piece of surgical equipment (Column 3, lines 6-7), whereby data is transmitted to and from the surgeon's control panel via the ancillary circuit. In contrast, the present invention requires that the information will be transmitted over the surgical network, thus allowing the medical device to directly communicate with the control center, without having the signal first go through the ancillary network and reach the controller, as Bauer does.

Transmitting the data over the same connection works more efficiently than having the signal first go through the ancillary network. Certain types of networks provide advantages over others and often it is not the best solution to completely isolate a device to only a single network for all purposes of communication. The present invention allows auxiliary medical devices to communicate with multiple networks (surgical and ancillary). This allows for a more efficient distribution of resources, works more quickly, and provides greater flexibility to the system.

Bauer is not concerned with optimizing network communications between the medical instruments and the centralized controller. However, the present invention claimed is geared towards network optimization, which differentiates the present

invention from Bauer. It would not be obvious to transmit command and control information via the surgical network, as this requires optimizing the network communication system. Bauer does not claim any advances to optimize the network communication system, and rather is concerned solely with the big picture view of a surgeon's command and control center. In contrast, all independent claims of the present invention have been updated to highlight novel aspects based upon optimizing the network communication system.

Essentially, the entirety of the Examiner's rejection rests on the statement: "Therefore Official Notice (see MPEP 2144.01) is taken that it would have been obvious to one of ordinary skill in the art to send command and control information to Bauer's endoscopic camera over the same connection (the surgical network) that it sends command and control information to surgical equipment in order to have a common interface to distribute commands of all the devices." Applicant respectfully, but strongly, traverses this assertion.

First, the Examiner's apparent attempt to take Official Notice as to what "would have been obvious to one of ordinary skill in the art" is unquestionably improper. Even in the very limited circumstances where it is proper for Official Notice to be taken, Official Notice may only be taken of "facts not in the record." See MPEP 2144.03. Certainly, whether or not some modification would or would not be obvious to one of ordinary skill in the art is not a fact, and therefore, any attempt to take Official Notice as to whether or not a modification would be obvious is entirely improper.

In view of the above, Applicant assumes that the Examiner was instead attempting to take Official Notice of the alleged "fact" that it was common knowledge in the art, in the context of medical device control systems, to send command and control information to a first medical device (e.g., an endoscopic camera) over the same connection (e.g., a surgical network) that it sends command and control information to

other surgical devices in order to have a common interface to distribute commands of all the devices, but receive data back from the first medical device (e.g., video data from an endoscopic camera) over a second, separate network (e.g., an ancillary network). Again, Applicant strongly disagrees and traverses this contention.

With respect to the appropriateness of taking Official Notice in general, the MPEP and case law make crystal clear that the situations when taking Official Notice is appropriate are extremely limited. More specifically, MPEP 2144.03, in part, states the following:

Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While "official notice" may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)).

It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21. See also *In re Grose*, 592 F.2d 1161, 1167-68, 201 USPQ 57, 63 (CCPA 1979) ("[W]hen the PTO seeks to rely upon a chemical theory, in establishing a prima facie case of obviousness, it must provide evidentiary support for the existence and meaning of that theory."); *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) ("[W]e reject the notion that judicial or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice.").

It is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience- or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings."). While the court explained that, "as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction," it made clear that such "expertise may provide sufficient support for conclusions [only] as to peripheral issues." *Id.* at 1385-86, 59 USPQ2d at 1697.

Any rejection based on assertions that a fact is well-known or is common knowledge in the art without documentary evidence to support the examiner's conclusion should be judiciously applied. Furthermore, as noted by the court in *Ahlert*, any facts so noticed should be of notorious character and serve only to "fill in the gaps" in an insubstantial manner which might exist in the evidentiary showing made by the examiner to support a particular ground for rejection. It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based. See *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697; *Ahlert*, 424 F.2d at 1092, 165 USPQ 421.

The MPEP and case law also make clear the fact that if Applicant challenges a factual assertion as not properly officially noticed, the Examiner must support the finding with adequate evidence. In this regard, MPEP 2144.03, in part, states as follows:

If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2).

In the present case, there are a number of deficiencies with the Examiner's attempt to take Official Notice. For example, in addition to the above-discussed

erroneous attempt to take Official Notice as to a conclusion of obviousness rather than a fact, the Examiner has made no mention of a time period as to when the “fact” was alleged to have been capable of instant and unquestionable demonstration as being well-known in the art. Applicant respectfully points out that the present application was filed on June 23, 2003, and claims the benefit of an earlier application filed on January 17, 2003. Thus, what may or may not be well-known in the art now is not prior art to the present application. What is germane to the question of patentability is what was capable of instant and unquestionable demonstration as being well-known in the art during the 2002/2003 time frame or earlier. What is the basis for the Examiner’s understanding of what was well known in the art more than 5 years ago? Was the Examiner an expert in the field of medical control systems during that time period? Is his understanding of what was well-known based upon some documentation from that time? Applicant respectfully submits that that an affidavit or declaration or some supporting documentation is necessary to support the Examiner’s contention.

Moreover, as quoted above: “It is never appropriate to rely solely on ‘common knowledge’ in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based.” In the present case, as explained fully in Applicant’s Response filed on December 3, 2007, and also to some extent herein, the crux of Applicant’s invention, and the distinguishing feature of all claims, is a medical device control system which sends command and control information to a first medical device over the same connection (e.g., a surgical network) that it sends command and control information to other surgical devices, but receives data back from the first medical device over a second, separate network (e.g., an ancillary network). As this is the main distinguishing feature of the present invention, and as this is the very feature of which the Examiner is apparently attempting to take Official Notice, the Examiner’s attempt to take Official Notice is the principal evidence upon which the rejection was based. This is clearly improper.

Turning now to the properly cited prior art, a person skilled in the art would not have been motivated to combine the teachings of Bauer and Flach, or Bauer and Suzuki to render the claims obvious. Flach teaches a wireless medical telemetry system that collects real-time patient data. While Flach teaches medical devices that send data to a control hub, Flach does not teach network optimization and rather deals with the problem of signal loss caused by multi-path interference of wireless networks. While Flach does teach sending signals over different wireless frequencies, it teaches that signals from each medical device must be different as each patient in the hospital must have a different tag from their telemetry device. In contrast, the present invention teaches the use of two (2) networks, whereby each medical device on the network is connected and can transmit data via the surgical network and ancillary network. Both networks connect the auxiliary medical device to the controller. Flach simply teaches the transmittal of a data signal over one (1) wireless network, not two separate networks which both connect the same auxiliary medical device to the controller, as the present invention teaches.

Combining Flach and Bauer would not render the present invention obvious as while Flach discloses use of Ethernet, the network optimization of the present invention is not disclosed by either the Flach or Bauer reference.

Suzuki teaches an Ethernet network as well as a self-configuring and CAN buses, and how these buses handle an order of information. Suzuki does not teach network optimization and rather teaches a network for storing and sending messages through a plurality of network controllers. It does not discuss using multiple circuits and networks to connect devices to the control center, as the present invention does. Suzuki does not teach anything that would lead one to modify Bauer to arrive at the claimed invention, and combining Bauer and Suzuki would result in an invention that does not disclose connecting an auxiliary medical device through the surgical network, as the present invention suggests.

For the foregoing reasons, Applicant respectfully submits that all pending claims, namely Claims 1-8, 10-29, 31-50, 52-71 and 73-82, are patentable over the references of record, and earnestly solicits allowance of the same.

Respectfully submitted,

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